GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

STARRED QUESTION NO:149
ANSWERED ON:27.07.2016
Marine Habitat Research
Senthilnathan Shri PR.

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government has allocated adequate funds and technology support for marine habitat research in the country particularly the coastal areas of Tamil Nadu and if so, the details thereof;

(b) the funds allocated during the last three years and the current year so far, year-wise;

(c) whether the Union Government has conducted any research on the changes undergone by marine habitation and marine organisms due to tidal changes, environment pollution and undersea tremors/tsunamis/hurricanes/floods etc.;

(d) if so, the details of the major changes reported during the last 2-3 decades to Marine Habitat; and
(e) the steps taken to protect marine life and environment?

Answer

THE MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a)-(e) A statement is laid on the Table of the House.

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY (a) to (e) TO STARRED QUESTION NO. *149 REGARDING "MARINE HABITATION RESEARCH" TO BE ANSWERED ON WEDNESDAY, JULY 27, 2016

(a) Yes, Madam. The Government of India set up the National Centre for Sustainable Coastal Management (NCSCM) under the Ministry of Environment Forest & Climate Change at Chennai during 2011-2012. The Centre has undertaken various research studies with respect marine environment, ecology and habitat of entire Indian coast including the islands. The Centre provides knowledge support on policy and scientific matters related to integrated Coastal Zone Management (ICZM) and conservation of coastal resources along Indian coast including the islands. NCSCM has mapped the Ecologically Sensitive Areas (ESAs) for Tamil Nadu and assisted the Tamil Nadu State Government in preparing the Detailed Project Report for implementing ICZM in the state. The extent of ESAs as per CRZ 2011 for the state of Tamil Nadu are as follows:

No. Ecologically Sensitive Area Area (Km2)
1 Mangrove 119.13
2 Corals 23.30
3 Seagrass 398.81
4 Salt Marsh 59.40
5 Horseshoe crab habitat 0.00
6 Turtle Nesting Sites 2.78
7 Sand Dune 31.03
8 Mudflat 189.43
9 Protected Area (Reserve Forest, National Park, Marine Protected Area, Wildlife Sanctuary & Other Protected Areas) 888.11
10 Archaeological & Heritage Site 0.79

(b) the year-wise funds allocated to support marine habitat research and technology development are as follows:

Year Allocation (Rs in crores)
2013-14 99.13
2014-15 149.95
2015-16 99.00
2016-17 126.27

(c) Yes. Madam.

(d) Although there is no systematic research to study for long-term decadal scale changes due to tides, tsunami, hurricane, floods

which are episodic in nature, a few studies were conducted to address the effects of pollution in the coastal areas of India. These studies indicate that a marginal increase in microbial activity in some coastal areas of the country due to discharge of domestic sewage. NCSCM has mapped the boundaries of coastal ecologically sensitive areas (ESAs) (CRZ I areas) areas which include mangroves, coral reefs, salt marshes, seagrass beds, turtle nesting grounds, etc, for the entire country as per the Coastal Regulation Zone (CRZ) 2011 notification, issued under the Environment Protection Act, 1986. In order to monitor the changes in specific coastal ecosystems due to pollution and various stressors, NCSCM has developed (i) Framework for Cumulative Environment Impact Assessment for Gulf of Kachch and (ii) Ecosystem Health Report Cards for Chilika lake, Gulf of Kuchchh. NCSCM has undertaken studies on the impact of tropical cyclone (Lehar) on the seagrass ecosystems in Ross and Smith Islands in Andaman, wherein about 2 ha of seagrass beds have been destroyed. Studies on the coral reefs in Palk Bay and Gulf of Mannar show that about 25% of the reefs have bleached during April-May, 2016 due to elevated sea surface temperature and further studies on their recovery are underway.

(e) The Ministry of Environment Forest & Climate Change has declared 25 marine protected areas in peninsular India and 106 Marine Protection Areas (MPAs) in the country's islands under the Wild life Protection Act (1972) to protect the wildlife and their habitat. The coastal ecologically sensitive areas have been mapped and the activities within such areas are regulated as per Coastal Regulation Zone Notification (2011) aimed at protecting the coastal and marine habitats.